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AUTHOR Hathaway, Walter E.
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ABSTRACT

While effective schools research has inspired new efforts toward improving education for all students, it is flawed by offering simplistic prescriptions based on correlational studies focusing on basic skills achievement. Effective school research and theory can be upgraded by a more careful definition of the goals of learning and a systematic analysis of the interdependencies of effective learning, teaching, and schooling that sorts out conditions from causal factors. Interacting factors of learning include characteristics of the learner and the learning task, and learner activities, all of which are at least partially under the influence of schools. Factors of effective teaching include belief that all students can learn, clear and high academic and behavioral expectations, well defined and maintained classroom procedures, evaluation of student progress and evaluative feedback, clear communication of material, the direct instructional approach, appropriate questioning strategies, and frequent and appropriate reinforcement. Effective schooling is marked by such factors as staff commitment to success of students and colleagues, secure and orderly environment, progressive student involvement and responsibility, appropriate use of time, accurate and timely evaluation, clear and consistent consequences for meeting and exceeding expectations, parent and community support, and strong leadership. An instructional effectiveness checklist illustrates application of the research. (MJL)

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EFFECTIVE TEACHERS IN EFFECTIVE SCHOOLS

Presented at the Annual Meeting

of the

American Educational Research Association

Montreal, Canada

April, 1983

Walter E. Hathaway

Director of Research and Evaluation

Portland (OR) Public Schools

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INTRODUCTION

FOR THE LAST TEN YEARS AND MORE I HAVE BEEN WORKING WITH COLLEAGUES IN SCHOOL ADMINISTRATION AND CLASSROOM TEACHING AND IN EDUCATIONAL RESEARCH, EVALUATION AND CURRICULUM TO IDENTIFY AND APPLY APPROACHES TO IMPROVING SCHOOLING AND TEACHING. WE HAVE PURSUED THIS GOAL BOTH THROUGH OUR OWN LOCAL, REGIONAL AND NATIONAL EFFORTS AND BY STUDYING THE LITERATURE ON THE SIMILAR EFFORTS OF OTHERS. THE GROWING BODY OF WORK ON EFFECTIVE SCHOOLING AND TEACHING THAT WE HAVE BEEN CAREFULLY MONITORING SEEMS TO BE BOTH THE MOST WONDERFUL AND YET TROUBLING GIFT THAT THE RESEARCH PROFESSION HAS EVER OFFERED UP TO ITSELF, TO THE BROADER EDUCATION PROFESSION AND TO SOCIETY IN GENERAL.

AN UNBIASED REVIEW OF THE RECENT RESEARCH ON EFFECTIVE SCHOOLS AND CLASSROOMS LEADS TO TWO OVERWHELMING AND SEEMINGLY CONTRADICTORY CONCLUSIONS. FIRST OF ALL, IT IS TROUBLING THAT THE RESEARCH ITSELF IS WEAK IN MANY RESPECTS, ESPECIALLY IN ITS TENDENCY TO OFFER SWEEPING AND YET SIMPLISTIC RECIPES FOR CAUSING IMPROVEMENTS IN SCHOOLS AND TEACHING FROM NON-EXPERIMENTAL, LARGELY CORRELATIONAL STUDIES, NARROWLY FOCUSED ON THE DEPENDENT VARIABLE OF BASIC SKILLS ACHIEVEMENT. SECONDLY, IN SPITE OF ITS LIMITATIONS, THE REPORTED RESULTS OF THE RESEARCH HAVE STRUCK SUCH A RESPONSIVE CHORD IN THE HEARTS, SOULS AND MINDS OF EDUCATORS AND PUBLIC ALIKE THAT IT HAS UNDENIABLY STIMULATED WONDERFUL NEW EFFORTS TOWARD IMPROVING THE IMAGE AND THE REALITY OF AMERICAN EDUCATION. IT IS IN THIS CONGRUENCE BETWEEN THE FINDINGS OF RESEARCHERS AND THE INTUITION AND EXPERIENCE OF SCHOOL TEACHERS AND ADMINISTRATORS THAT THE POWER AND WONDER OF EFFECTIVENESS RESEARCH LIES.

TO ITS GREAT CREDIT THE RESEARCH ON EFFECTIVE SCHOOLS AND EFFECTIVE TEACHERS HAS CHALLENGED THE SELF-FULFILLING AND SELF-DEFEATING PROPHECY THAT "SCHOOLS AND TEACHERS DON'T AND CAN'T MAKE A DIFFERENCE IN ACADEMIC ACHIEVEMENT, ESPECIALLY OF POOR AND MINORITY STUDENTS." THIS WIDELY-HELD INTERPRETATION OF JAMES COLEMAN'S 1966 EQUALITY OF EDUCATIONAL OPPORTUNITY REPORT AND OF THE CASCADE OF SIMILAR STUDIES WHICH FOLLOWED, SEEMED TO RE-CONDEMN A LARGE PORTION OF OUR CITIZENRY TO A NEW SLAVERY BY FORGING UNBREAKABLE SHACKLES OF POVERTY AND IGNORANCE ASSOCIATED WITH LOWER SOCIAL CLASS. THE DISCOURAGING WORD FROM THE SOCIAL SCIENTISTS WHO DOMINATED THAT PERIOD SEEMED TO BE THAT THE AMOUNT THAT A CHILD COULD LEARN WAS SOMEHOW PREDETERMINED BY FACTORS OUTSIDE THE SCHOOL'S CONTROL SUCH AS THE HOME ENVIRONMENT AND THAT WE MIGHT AS WELL RESIGN OURSELVES TO NOT BEING ABLE TO HELP OUR PUPILS SIGNIFICANTLY VARY THE AMOUNT OF THEIR LEARNING BY VARYING SCHOOL AND CLASSROOM PRACTICES.

BUT THE RECENT AND GROWING BODY OF RESEARCH BY WEBER, EDMONDS, BROOKOVER, LEZOTTE, BLOOM, RUTTER, WALBERG, GAGE, ROSENSHINE, MEDLEY, BERLINER, BROPHY, AND MANY OTHERS HAS IDENTIFIED SCHOOLS AND TEACHERS WHO HAVE REGULARLY HELPED STUDENTS THROW OFF THE BONDS HOLDING THEM BACK FROM FULL PARTICIPATION IN THE ECONOMIC AND INTELLECTUAL LIFE OF OUR SOCIETY. THIS RESEARCH HAS ALSO IDENTIFIED THE FACTORS OF SCHOOL AND CLASSROOM BELIEF, ORGANIZATION AND BEHAVIOR THAT CAN HELP ALL SCHOOLS AND TEACHERS LEAD ALL STUDENTS TO SUCCEED. BY SO DOING, THE RESEARCH ON EFFECTIVE SCHOOLS AND EFFECTIVE TEACHERS IS BEGINNING TO RESTORE THE CONFIDENCE OF THE PUBLIC IN EDUCATION AND TO REBUILD THE BELIEF OF EDUCATORS IN OUR ABILITY TO MAKE THE SORTS OF POSITIVE DIFFERENCES FOR CHILDREN, FAMILIES AND SOCIETY THAT DREW US TO THE EDUCATIONAL PROFESSION IN THE FIRST PLACE.

THE TRADITION OF RESEARCH ON EFFECTIVE TEACHING IS LONG AND RICH. THE MORE RECENT BODY OF RESEARCH ON THE EFFECTIVENESS OF SCHOOLING HAS BEEN CREATED AT LEAST PARTIALLY OUT OF A GROWING CONCERN FOR SCHOOLS AS ORGANIZATIONS. THIS LATTER BODY OF RESEARCH ON SCHOOLS AND THE FACTORS THAT MAKE THEM MORE OR LESS EFFECTIVE HAS RESTIMULATED AND REFOCUSED MUCH RECENT RESEARCH ON CLASSROOM TEACHING, AND I WILL HAPPILY TREAT BOTH BODIES OF RESEARCH TODAY.

THE GOALS OF LEARNING AND THE FOCUS OF EFFECTIVENESS RESEARCH

ONE SERIOUS LIMITATION OF THE RESEARCH ON EFFECTIVE SCHOOLS AND CLASSROOMS IS THAT FOR THE MOST PART IT HAS FOCUSED UPON THE DEPENDENT VARIABLE OF BASIC SKILLS ACHIEVEMENT OF LOW-PERFORMING STUDENTS. THIS IS A CRUCIAL CONSTRAINT AND ONE THAT HAS INHERENT IN IT A POSSIBILITY FOR DISTORTION AND NARROWING OF THE MISSION OF THE SCHOOLS. TO THE EXTENT THAT WE CONFUSE THE QUESTION "WHAT IS AN EFFECTIVE SCHOOL?" WITH "WHAT DOES A SCHOOL DO TO BE EFFECTIVE AT RAISING THE BASIC SKILLS LEVELS OF ITS LOW-ACHIEVING STUDENTS?" WE RUN THE RISK OF REWARDING THE FORMER AS IF IT WERE THE LATTER AND THUS FOCUSING THE WHOLE SCHOOL ON THIS ONE IMPORTANT TASK OF RAISING THE BASIC SKILLS LEVELS OF CHILDREN WHO THUS FAR HAVE ACHIEVED POORLY.

ANY TIMELY, COMPREHENSIVE RESEARCH AND THEORIZING ON EFFECTIVE SCHOOLS AND CLASSROOMS MUST BEGIN FROM A COMPREHENSIVE SET OF ASSUMPTIONS OR AGREEMENTS ON THE FUNDAMENTAL PURPOSES OF EDUCATION IN SOCIETY. SINCE EDUCATION IS CONCERNED WITH HELPING STUDENTS LEARN, ITS BASIC MISSION CAN BE BEST STATED IN TERMS OF ONE'S VISION OF GOOD LEARNERS. ONE SUCH VISION IS AS FOLLOWS:

FIGURE 1

THE GOALS OF LEARNING

GOOD LEARNERS HAVE THE INTELLECTUAL, SOCIAL AND MORAL EXCELLENCE AND CAPACITY TO GROW TO THEIR HIGHEST LEVELS AS HUMAN BEINGS. THEY:

1. RESPECT AND LIKE THEMSELVES.
2. RESPECT, CARE FOR, AND ACCEPT OTHERS.
3. HAVE A POSITIVE ATTITUDE TOWARD LEARNING AND TOWARD SCHOOL.
4. ARE ACTIVE AND GENERATIVE, THAT IS THEY ARE INCREASINGLY ABLE TO SET HIGH BUT REALISTIC INTELLECTUAL, SOCIAL, MORAL AND LIFE GOALS, AND TO ACCEPT RESPONSIBILITY FOR THEIR ATTAINMENT AND CONSTANT REVIEW.
5. ARE COOPERATIVE WITHOUT BEING DOCILE.
6. ARE INDEPENDENT WITHOUT BEING OBSTINANT.
7. POSSESS CAREFULLY CHOSEN AND EXAMINED VALUES AND COMMITMENTS.
8. HAVE A CAPACITY FOR EXCITEMENT, PLAY, JOY, LOVE, COMMITMENT, LOYALTY, CHALLENGE, AND GROWTH.
9. HAVE GOOD THINKING, STUDYING AND LEARNING SKILLS.
10. POSSESS A GROWING BREADTH OF WORLD VIEW AND GENERAL EDUCATION.
11. HAVE IN-DEPTH KNOWLEDGE AND SKILLS IN THE BASICS AS WELL AS IN OTHER CHOSEN ARENAS.

I HAVE PRESENTED THIS VERSION OF THE GOALS OF LEARNING TO ILLUSTRATE THE LIMITATIONS OF CURRENT RESEARCH AND THEORIZING ON EFFECTIVE SCHOOLS AND CLASSROOMS WHICH FOCUSES ALMOST ENTIRELY ON THE FINAL GOAL ENUNCIATED ABOVE, BASIC SKILLS ACHIEVEMENT. THIS FACT DOES NOT INVALIDATE THAT RESEARCH OR THOSE THEORIES. IT DOES URGE CAUTION IN APPLYING THEIR LESSONS LEST WE FAIL TO MEET LEGITIMATE AND IMPORTANT ENDS OF EDUCATION, WHICH HAPPEN TO BE LESS MEASURABLE.

EFFECTIVE LEARNING, TEACHING AND SCHOOLING

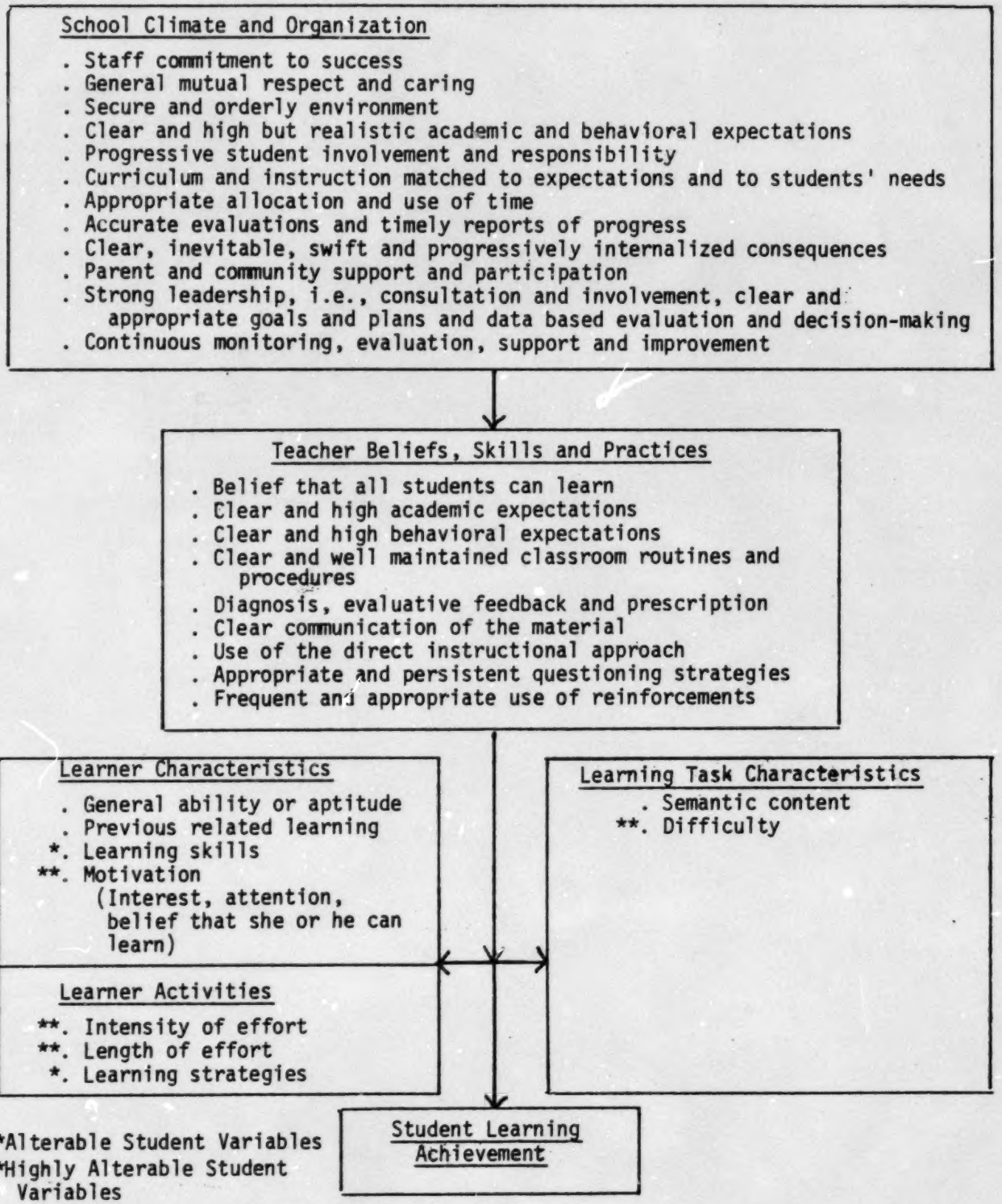
ANOTHER OF THE GREAT LACKS OF CURRENT EFFECTIVENESS RESEARCH AND THEORY IS THAT THERE HAS BEEN LITTLE SYSTEMATIC EFFORT AT TRACING THE INTERACTIONS AND INTERDEPENDENCIES THAT STRETCH FROM THE MAGIC MOMENT OF MASTERY OF A PARTICULAR LEARNING TASK BY AN INDIVIDUAL LEARNER BACK THROUGH THE KEY INTERVENTIONS BY A TEACHER TO FOSTER THAT MOMENT AND EVEN FARTHER BACK TO THE WAY THE SCHOOL FUNCTIONS AS AN ORGANIZATION TO SUPPORT BOTH TEACHER AND LEARNER. TO BEGIN TO REMEDY THAT LACK IS THE TASK I HAVE SET MYSELF TODAY. IN PURSUIT OF ITS ACCOMPLISHMENT I WILL FIRST SKETCH THE KEY ALTERABLE AND UNALTERABLE FACTORS OF EFFECTIVE LEARNING, TEACHING AND SCHOOLING THAT MY READING OF THE RESEARCH AND MY OWN EXPERIENCE URGE. IN SO DOING I WILL TRACE THE RELATIONSHIPS OF SOME OF THE FACTORS OF EFFECTIVE TEACHING AND SCHOOLING TO THE ALTERABLE FACTORS OF LEARNING. THIS WILL ILLUSTRATE A CENTRAL THEME OF THIS MESSAGE, NAMELY THAT THE NECESSARY NEXT KEY STEP IN EFFECTIVENESS RESEARCH IS SUCH A SORTING OUT OF FACTORS THAT ARE MERE CONCOMITANTS OF EFFECTIVENESS AND THOSE THAT ARE CAUSALLY RELATED TO STUDENT LEARNING. FINALLY, AFTER THIS ANALYSIS, I WILL ATTEMPT TO PUT HUMPTY-DUMPTY BACK TOGETHER AGAIN BY RETURNING TO THE THEME OF SCHOOLS AS INTEGRATED SOCIAL ORGANIZATIONS, EACH WITH ITS OWN SPECIAL CHARACTER, WHICH RULES OUT DIVISIONIST, REDUCTIONIST OR MECHANISTIC EFFORTS AT REFORM AND IMPROVEMENT.

FACTORS OF EFFECTIVE LEARNING

IN THE ACT OF LEARNING, THREE MAJOR SETS OF FACTORS INTERACT. THESE ARE THE CHARACTERISTICS THAT THE LEARNER BRINGS TO THE LEARNING SITUATION, THE CHARACTERISTICS OF THE LEARNING TASK, AND THE ACTIVITIES OF THE LEARNER. THEY ARE DEPICTED IN FIGURE 2. LEARNER CHARACTERISTICS INCLUDE ATTITUDE

Figure 2

Factors of Effective Schooling, Teaching and Learning


School Climate and Organization
. Staff commitment to success
. General mutual respect and caring
. Secure and orderly environment
. Clear and high but realistic academic and behavioral expectations
. Progressive student involvement and responsibility
. Curriculum and instruction matched to expectations and to students' needs
. Appropriate allocation and use of time
. Accurate evaluations and timely reports of progress
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*. Learning skills
**. Motivation (Interest, attention, belief that she or he can learn)
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Learning Task Characteristics
. Semantic content
**. Difficulty
Student Learning Achievement

*Alterable Student Variables

**Highly Alterable Student Variables

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TOWARD SELF AS LEARNER, GENERAL ABILITY OR APTITUDE, PREVIOUS RELATED LEARNING, LEARNING SKILLS AND MOTIVATION, INTEREST, ATTENTION AND BELIEF THAT HE OR SHE CAN LEARN. IT IS THESE SORTS OF FACTORS THAT COLEMAN AND OTHERS SUGGESTED WERE MOST STRONGLY INFLUENCED BY FAMILY BACKGROUND AND SOCIO-ECONOMIC STATUS. COLEMAN MAY HAVE BEEN AT LEAST PARTIALLY CORRECT. BUT MORE RECENT RESEARCH SUGGESTS THAT AT LEAST TWO OF THESE FACTORS, LEARNING SKILLS AND MOTIVATION, ARE SUBJECT TO POWERFUL INFLUENCE BY THE TEACHER AND THE SCHOOL AND POSITIVE CHANGES IN THEM CAN AFFECT ACHIEVEMENT STRONGLY FOR THE BETTER. MOTIVATION IT SHOULD BE NOTED CAN BE INFLUENCED MORE DIRECTLY AND RAPIDLY THAN LEARNING SKILLS.

THE KEY CHARACTERISTICS OF THE LEARNING TASK INCLUDE ITS SEMANTIC CONTENT AND ITS DIFFICULTY. THE SEMANTIC CONTENT, WHAT IS TO BE LEARNED, IS SOMETHING OF A GIVEN IF IT IS INCLUDED IN THE REQUIRED CURRICULUM. BUT WHEN WE PRESENT THE TASK AND ITS PREREQUISITES TO THE STUDENT, THE DIFFICULTY OF THE TASK SET BEFORE HIM OR HER AT ANY GIVEN TIME IS VERY MUCH UNDER THE TEACHER'S CONTROL. AS WILL BE SEEN LATER ON, THERE ARE TWO CRITICAL ERRORS THAT MAY BE MADE IN THIS MATTER OF DIFFICULTY. THE FIRST IS TO HAVE SUCH LOW EXPECTATIONS FOR AN INDIVIDUAL OR A GROUP THAT WE DENY THEM ACCESS TO MORE DIFFICULT LEARNING TASKS AND THUS KEEP THEM FROM HAVING AN OPPORTUNITY TO LEARN WHOLE PARTS OF THE CURRICULUM. THE OTHER IS TO CAVALIERLY SET TASKS OF A DISCOURAGING AND IMPEDING LEVEL OF DIFFICULTY BEFORE STUDENTS WHEN WE KNOW

THEY SUCCEED BEST IN THE LONG RUN WHEN CONSISTENTLY OFFERED LEARNING TASKS ON WHICH THEY HAVE A HIGH RATE OF SUCCESS. THE RESOLUTION OF THIS APPARENT DILEMMA RESTS WITH THE TEACHER'S SKILL AT DIAGNOSING THE STUDENT'S READINESS FOR A NEW TASK BUT PLANNING AND PRESCRIBING LEARNING IN A SEQUENCE OF STEPS OF GRADUALLY ASCENDING DIFFICULTY.

THE FINAL SET OF LEARNING FACTORS ARE THE ACTIVITIES OF THE LEARNER. THESE CONSIST OF THE INTENSITY AND LENGTH OF THE EFFORT TO LEARN AND THE LEARNING STRATEGIES EMPLOYED. OF THESE THREE, THE FIRST TWO ARE VERY MUCH UNDER THE CONTROL OF THE LEARNER AND THE INFLUENCE OF THE SCHOOL. THE FINAL FACTOR, LEARNING STRATEGIES EMPLOYED, ARE ALSO ALTERABLE BUT ON A LONGER TIMELINE.

IF THERE ARE TWO KEY ELEMENTS AT THE HEART OF THE MATTER OF SCHOOL AND CLASSROOM EFFECTIVENESS, IT IS THE TWO FACTORS OF INTENSITY AND LENGTH OF STUDENT EFFORT TO LEARN. TO THE EXTENT THAT ANY OTHER FACTOR IN THE CLASSROOM OR THE SCHOOL INFLUENCES THESE TWO POSITIVELY, THEY WILL CONTRIBUTE TO HIGHER ACHIEVEMENT, ALL THINGS ELSE BEING EQUAL.

FACTORS OF EFFECTIVE TEACHING

MY REVIEW AND ANALYSES OF THE LITERATURE ALONG WITH MY WORK WITH PRINCIPALS AND TEACHERS IN THE PORTLAND SCHOOL SYSTEM SUGGESTS THAT THERE ARE 9 MAJOR FACTORS OF EFFECTIVE TEACHING OVER AND ABOVE THOSE

ELEMENTS THAT MAY BE ASSUMED TO BE PRESENT SUCH AS KNOWLEDGE BY THE TEACHER OF THE SUBJECT MATTER TO BE LEARNED. THESE KEY SKILLS AND PRACTICES WHICH ARE AGAIN FOUND IN FIGURE 2 ARE:

1. BELIEF THAT ALL STUDENTS CAN LEARN;

2. CLEAR AND HIGH ACADEMIC EXPECTATIONS THAT REFLECT THE CURRICULUM ADOPTED BY THE DISTRICT (AND WHICH INCLUDE COVERAGE OF THE GOALS TO BE TESTED) BUT WHICH ARE SEQUENCED SO THAT EACH STUDENT EXPERIENCES A HIGH RATE OF SUCCESS;

3. CLEAR AND HIGH BEHAVIORAL EXPECTATIONS (RULES) AND CONSISTENT ENFORCEMENT;

4. CLEAR AND WELL MAINTAINED CLASSROOM ROUTINES AND PROCEDURES AIMED AT MINIMIZING DISRUPTION AND LOST LEARNING TIME;

5. DIAGNOSIS OF STUDENT LEARNING PROGRESS AND DIFFICULTIES AND PROVISION OF EVALUATIVE FEEDBACK INCLUDING PRESCRIPTION OF WAYS TO MAINTAIN PROGRESS AND OVERCOME DIFFICULTIES FOR EXAMPLE BY REGROUPING;

6. CLEAR COMMUNICATION OF THE MATERIAL TO BE LEARNED;

7. USE OF THE DIRECT INSTRUCTIONAL APPROACH ESPECIALLY FOR LOWER ORDER (CONVERGENT) COGNITIVE OBJECTIVES;

8. USE OF QUESTIONING STRATEGIES THAT ARE APPROPRIATE IN DIFFICULTY AND PERSISTENCE;

9. FREQUENT, OBJECTIVE AND APPROPRIATE USE OF REINFORCEMENTS SUCH AS PRAISE, ESPECIALLY WITH LOWER ACHIEVING STUDENTS.

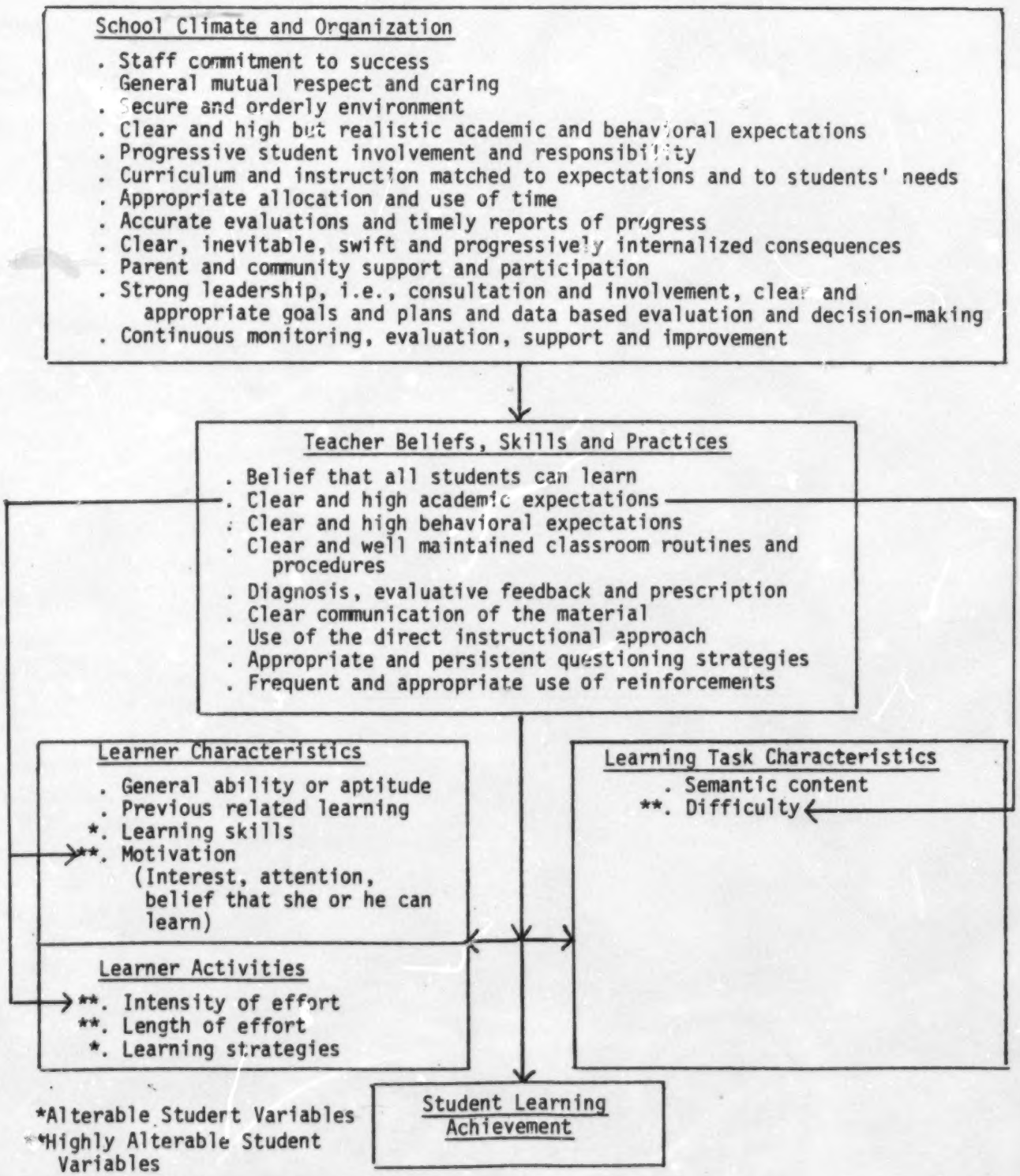
I WILL GIVE SEVERAL BRIEF ANALYSES TO ILLUSTRATE HOW AND WHY SOME OF THESE FACTORS ARE INDEED EFFECTIVE IN TERMS OF THEIR IMPACT ON STUDENT LEARNING.

LET US TAKE FOR EXAMPLE TEACHER EFFECTIVENESS FACTOR 2, I.E., "CLEAR AND HIGH ACADEMIC EXPECTATIONS". AS FIGURE 3 ILLUSTRATES, THE EFFECT OF SUCH EXPECTATIONS ON STUDENT LEARNING IS MEDIATED PRINCIPALLY THROUGH ITS EFFECT ON THE LEARNER CHARACTERISTIC OF MOTIVATION, THE INTENSITY AND LENGTH OF LEARNER ACTIVITIES, AND THE DIFFICULTY OF LEARNING TASK CHARACTERISTICS AND THEIR INTERACTIONS. TO PUT IT SIMPLY, IF THE TEACHER CONSISTENTLY HOLDS OUT HIGH EXPECTATIONS FOR A STUDENT AND HELPS HIM OR HER TO SUCCEED IN MEETING SUCH EXPECTATIONS THE FOLLOWING WILL HAPPEN: THE STUDENT'S BELIEF THAT HE OR SHE CAN LEARN WILL GROW AND WITH IT THE GENERAL LEVEL OF MOTIVATION TO LEARN, THE INTENSITY AND LENGTH OF EFFORTS TO LEARN WILL INCREASE, THE STUDENT WILL EVENTUALLY COVER EVEN MORE DIFFICULT MATERIAL AND THUS STUDENT LEARNING WILL IMPROVE.

FIGURE 4 ILLUSTRATES A SECOND EXAMPLE, THIS TIME OF FACTOR 8, I.E., PERSISTENT QUESTIONING STRATEGIES. AGAIN, STUDENT MOTIVATION IS IMPROVED, THIS TIME BY FORCEFUL DIRECTING OF ATTENTION, AND THE INTENSITY OF THE STUDENT'S EFFORT TO LEARN IS MAGNIFIED, WITH THE RESULT AGAIN THAT IMMEDIATE STUDENT LEARNING IS IMPROVED. TO THE EXTENT THAT THE QUESTIONING STRATEGY HAS

Figure 3

Factors of Effective Schooling, Teaching and Learning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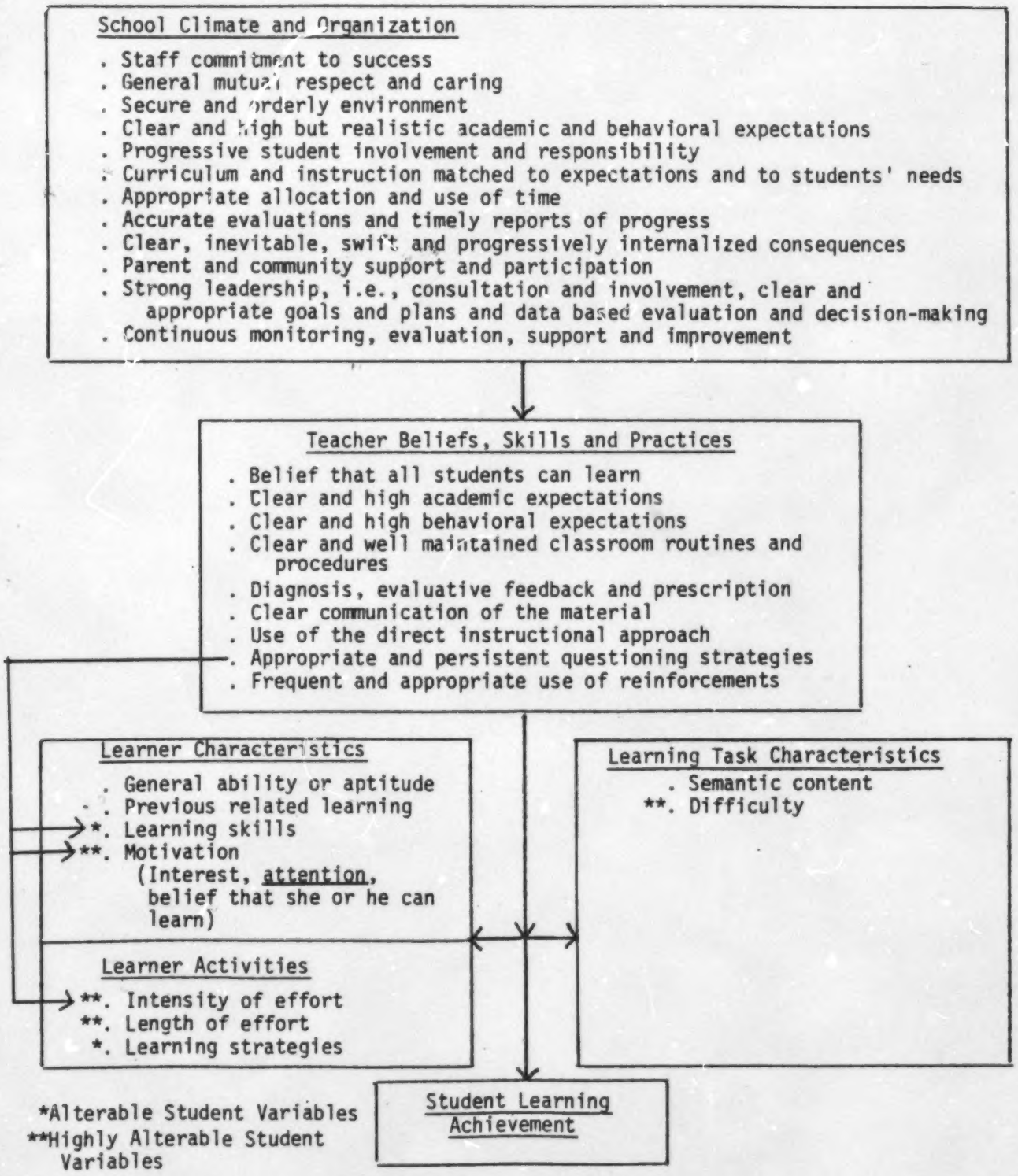
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MODELED NEW LEARNING SKILLS AND STRATEGIES THAT HAVE BEEN INTERNALIZED BY THE STUDENT, LONG RANGE IMPROVEMENT IN READINESS FOR FUTURE LEARNING MAY ALSO HAVE BEEN ATTAINED. EACH OF THE OTHER 7 TEACHER BELIEFS, SKILLS AND PRACTICES SET FORTH HERE COULD BE SIMILARLY ANALYZED AND HAVE THEIR INTERDEPENDENCIES HYPOTHESIZED AS COULD OTHERS BE WHICH ARE PROPOSED ELSEWHERE. A RESEARCH BASED EXPLORATION OF THE VALIDITY OF SUCH HYPOTHESES SEEMS A LOGICAL NEXT STEP FOR EFFECTIVENESS RESEARCH.

FACTORS OF EFFECTIVE SCHOOLING

IT SHOULD BE OBVIOUS THAT THE SEPARATION OF THE FACTORS OF EFFECTIVENESS INTO THOSE OF LEARNING, TEACHING AND SCHOOLING IS ARTIFICIAL AND TO SOME EXTENT ARBITRARY. A SCHOOL IS A COMMUNITY WITH BELIEFS, RULES, PRACTICES AND RELATIONSHIPS THAT INTERDEPENDENTLY AFFECT THE BEHAVIOR OF EVERYONE IN THE SCHOOL AND ULTIMATELY INFLUENCE THE PROGRESS OF EACH STUDENT IN LEARNING.

THERE ARE MANY FORMULATIONS OF THE FACTORS OF EFFECTIVE SCHOOLING. I WOULD SUMMARIZE THEM SIMPLY AS FOLLOWS: GOOD SCHOOLS ARE PLACES OF PURPOSEFUL CARING, SHARING, LEARNING, AND GROWING WHERE THERE ARE TO BE FOUND THE FOLLOWING TWELVE ELEMENTS:

1. STAFF COMMITMENT TO SUCCESS OF BOTH STUDENTS AND COLLEAGUES;

2. GENERAL MUTUAL RESPECT AND CARING AMONG ALL INDIVIDUALS AND GROUPS;

3. A SECURE AND ORDERLY ENVIRONMENT;

4. CLEAR AND HIGH, BUT REALISTIC, ACADEMIC AND BEHAVIORAL EXPECTATIONS FOR STUDENTS, TEACHERS, PROGRAMS AND THE SCHOOL AS A WHOLE;

5. INCREASING STUDENT INVOLVEMENT AND PROGRESSIVE GIVING OF RESPONSIBILITY AND CONTROL OVER LEARNING GOALS AND ACTIVITIES TO STUDENTS AS THEY MATURE;

6. ADAPTATION OF CURRICULUM AND INSTRUCTION TO THE ACADEMIC EXPECTATIONS AND TO STUDENTS' EXISTING LEVELS OF ACADEMIC PREPARATION, MOTIVATION, LEARNING STYLE, AND SPECIAL LACKS, INTERESTS AND STRENGTHS SO THAT INSTRUCTION IS TARGETED AND STUDENTS ARE ENTHUSED, CHALLENGED AND SUCCESSFUL;

7. APPROPRIATE ALLOCATION AND USE OF TIME;

8. ACCURATE EVALUATIONS AND TIMELY REPORTS OF PROGRESS TOWARD MEETING EXPECTATIONS;

9. CLEAR, INEVITABLE, SWIFT AND PROGRESSIVELY-INTERNALIZED CONSEQUENCES FOR MEETING AND EXCEEDING EXPECTATIONS;

10. PARENT AND COMMUNITY SUPPORT AND PARTICIPATION;

11. STRONG LEADERSHIP, CHARACTERIZED BY CONSULTATION AND INVOLVEMENT OF PARENTS, STUDENTS AND STAFF, CLEAR AND APPROPRIATE PLANS AND GOALS AND DATA BASED EVALUATION AND DECISION MAKING;

12. CONTINUOUS MONITORING, EVALUATION, SUPPORT AND IMPROVEMENT OF ALL OF THE ABOVE.

AS WITH FACTORS OF EFFECTIVE TEACHING, THE ULTIMATE TEST OF ANY PURPORTED FACTOR OF EFFECTIVE SCHOOLING IS ITS EFFECT ON STUDENT LEARNING. IN THE CASE OF SCHOOL LEVEL FACTORS, THIS EFFECT ON LEARNER CHARACTERISTICS, LEARNER ACTIVITIES OR LEARNING TASK CHARACTERISTICS MAY OCCUR EITHER DIRECTLY OR THROUGH ITS EFFECT ON TEACHER BELIEFS, SKILLS AND PRACTICES.

FIGURE 5 ILLUSTRATES HOW ONE SCHOOL FACTOR, A BUILDING-WIDE EFFORT TO CREATE AND MAINTAIN A SECURE AND ORDERLY ENVIRONMENT, COULD AFFECT STUDENT LEARNING BOTH DIRECTLY AND THROUGH THE TEACHER. FIRST OF ALL, SUCH AN ENVIRONMENT WILL ASSIST THE TEACHER IN MAINTAINING CLASSROOM ROUTINES AND PROCEDURES. SECONDLY, BOTH DIRECTLY AND INDIRECTLY, IT WILL TEND TO ELIMINATE DISTRACTIONS AND DISRUPTIONS AND TO PROMOTE INCREASES IN THE LENGTH AND INTENSITY OF STUDENT LEARNING EFFORTS.

FIGURE 6 PROVIDES A SECOND AND FINAL EXAMPLE OF HOW SCHOOL EFFECTIVENESS FACTORS SUPPORT STUDENT LEARNING BOTH DIRECTLY AND THROUGH THE IMPACT ON THE TEACHER. IN THIS EXAMPLE ACCURATE EVALUATIONS AND TIMELY REPORTS OF PROGRESS AID THE TEACHER IN HIS OR HER DIAGNOSTIC EFFORTS AND IN SUPPLYING FREQUENT AND APPROPRIATE REINFORCEMENTS. THEY ALSO TEND TO RAISE STUDENT MOTIVATION AND INTENSITY AND LENGTH OF EFFORT BOTH DIRECTLY AND INDIRECTLY.

Figure 5

Factors of Effective Schooling, Teaching and Learning

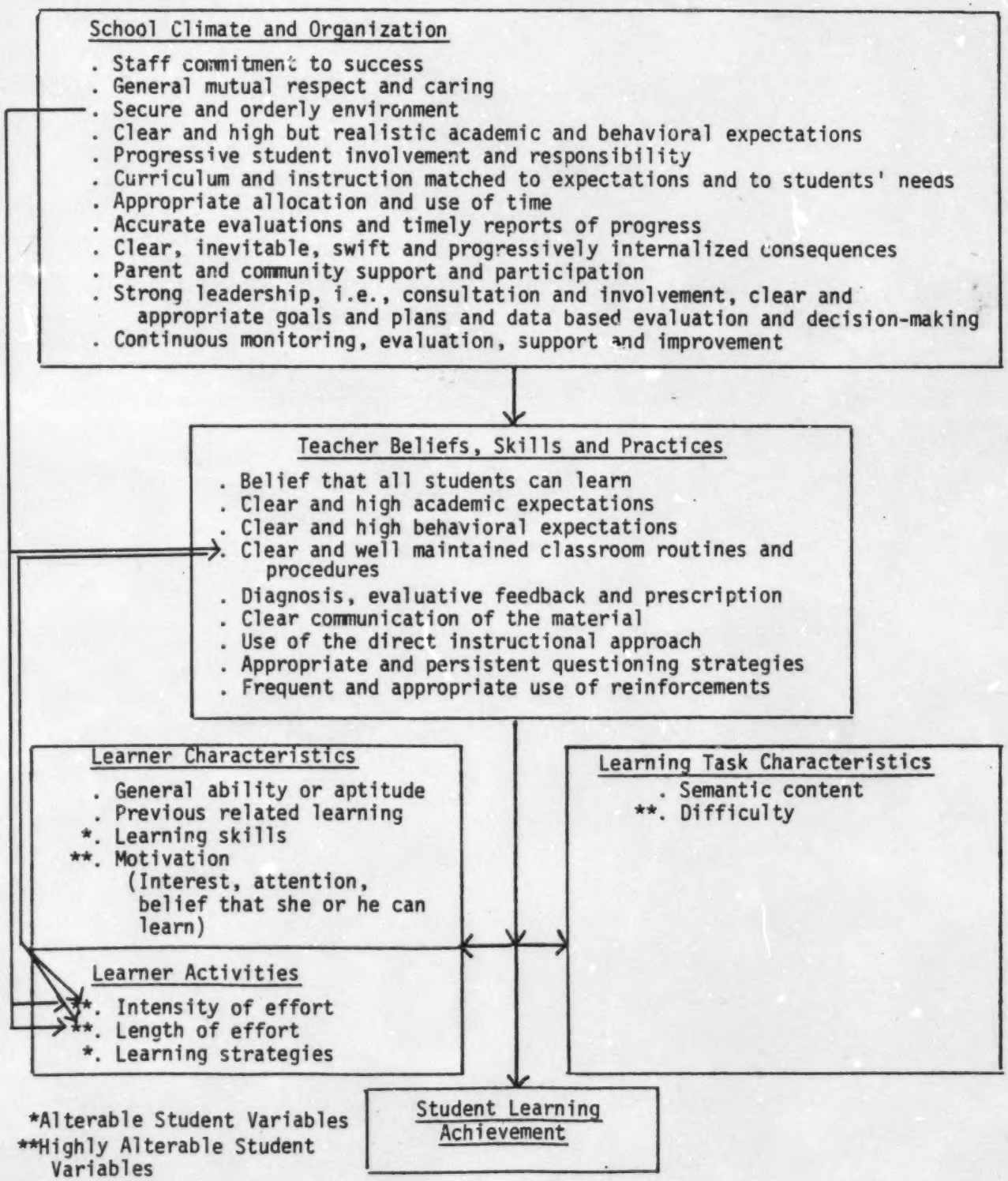
School Climate and Organization
. Staff commitment to success
. General mutual respect and caring
. Secure and orderly environment
. Clear and high but realistic academic and behavioral expectations
. Progressive student involvement and responsibility
. Curriculum and instruction matched to expectations and to students' needs
. Appropriate allocation and use of time
. Accurate evaluations and timely reports of progress
. Clear, inevitable, swift and progressively internalized consequences
. Parent and community support and participation
. Strong leadership, i.e., consultation and involvement, clear and appropriate goals and plans and data based evaluation and decision-making
. Continuous monitoring, evaluation, support and improvement
Teacher Beliefs, Skills and Practices
. Belief that all students can learn
. Clear and high academic expectations
. Clear and high behavioral expectations
. Clear and well maintained classroom routines and procedures
. Diagnosis, evaluative feedback and prescription
. Clear communication of the material
. Use of the direct instructional approach
. Appropriate and persistent questioning strategies
. Frequent and appropriate use of reinforcements
Learner Characteristics
. General ability or aptitude
. Previous related learning
*. Learning skills
**. Motivation (Interest, attention, belief that she or he can learn)
Learning Task Characteristics
. Semantic content
**. Difficulty
Learner Activities
**. Intensity of effort
**. Length of effort
*. Learning strategies
Student Learning Achievement
*Alterable Student Variables
**Highly Alterable Student Variables

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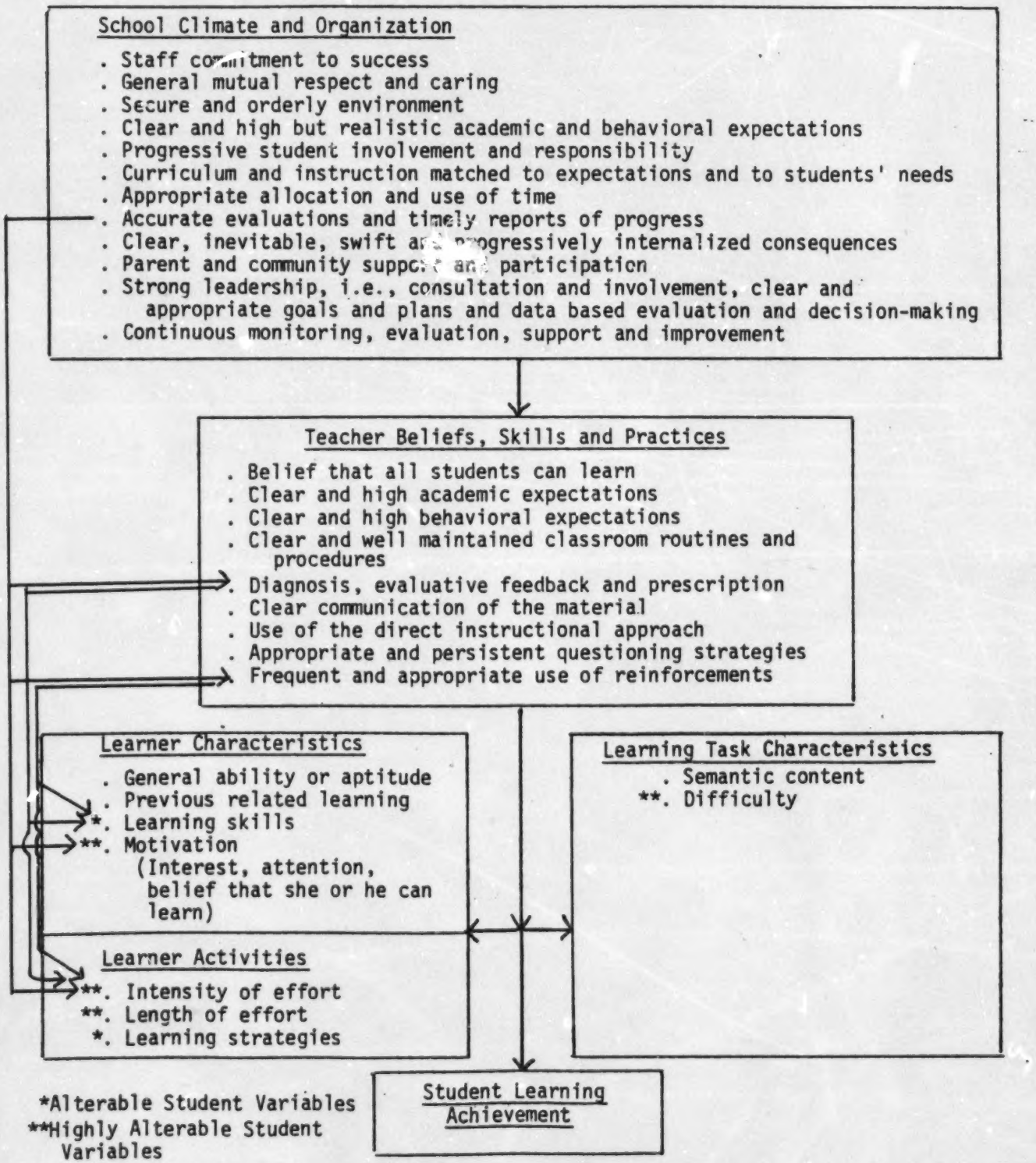
Figure 6

Factors of Effective Schooling, Teaching and Learning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CONCLUSION

THERE IS A TEMPTATION PRESENTED BY AN ANALYSIS, SUCH AS HAS JUST BEEN GIVEN, THAT MUST BE WARNED AGAINST. THE TEMPTATION IS TO ASSUME THAT BECAUSE SUCH FACTORS AND THEIR PROBABLE EFFECTS CAN BE ANALYZED SEPARATELY THEY CAN ALSO BE IMPLEMENTED ONE-BY-ONE OR IN SMALL COMBINATIONS. SUCH IS GENERALLY NOT THE CASE. ON THE CONTRARY, THE RESEARCH SUGGESTS THAT CHANGE TO GREATER ACADEMIC EFFECTIVENESS REQUIRES A CULTURAL EVOLUTION WITHIN THE SCHOOL AND ITS SUPPORT SYSTEMS. THUS, LONG-RANGE, MEANINGFUL CHANGE MUST BE THROUGH EVOKED, COMPREHENSIVE SELF-RENEWAL FROM WITHIN RATHER THAN PIECEMEAL ALTERATIONS EXTERNALLY IMPOSED BY ADMINISTRATIVE FIAT. ALSO, SUCH REAL CHANGE MUST BE ALLOWED TO BE GRADUAL, INCREMENTAL AND UNIQUE TO EACH SCHOOL IN AT LEAST SOME RESPECTS.

MANY PEOPLE, ESPECIALLY TEACHERS AND PRINCIPALS, WHO REVIEW FORMULATIONS SUCH AS THOSE I HAVE PROVIDED TODAY OF THE MUCH-HERALDED RESULTS OF THE RECENT RESEARCH ON EFFECTIVE SCHOOLS AND CLASSROOMS FIND THEMSELVES WONDERING WHAT ALL THE FUSS IS ABOUT! IT SEEMS TO THEM THAT IT SHOULD BE NO GREAT DISCOVERY TO ANYONE, EVEN RESEARCHERS, THAT CHILDREN LEARN BEST WHEN WE HAVE SCHOOLS WITH SAFETY AND ORDER, CLEAR AND APPROPRIATE GOALS SUPPORTED BY WELL-ALIGNED CURRICULUM, INSTRUCTION AND TESTING, FIRM PRINCIPAL LEADERSHIP, GOOD TEACHING AND HELPFUL PARENTING!

THERE ARE TWO RESPONSES. FIRST OF ALL, MANY IN EDUCATION HAD BEEN LED TO ABDICATE ADHERENCE TO THE STANDARDS REDISCOVERED IN EFFECTIVENESS RESEARCH BY THE INTELLECTUAL AND SOCIAL TURMOIL OF THE SIXTIES AND EARLY SEVENTIES. FOR MANY DURING THIS PERIOD, THE IMPERATIVE OF EQUITY LED TO A FEAR OF EXCELLENCE. THE RESEARCH ON THE FACTORS OF EFFECTIVE SCHOOLS AND CLASSROOMS HAS DONE EDUCATION A SERVICE IN MAKING IT RESPECTABLE AND EVEN NECESSARY ONCE AGAIN TO RETURN TO THE HIGH STANDARDS AND GOOD PRACTICES THAT OUR BEST EDUCATORS HAVE CHERISHED AND ADHERED TO ALL ALONG IN WORKING WITH ALL STUDENTS. SECONDLY, HOWEVER, THE RESEARCH IS ONLY AT THIS POINT GETTING TO THE MORE CRUCIAL QUESTION OF: HOW DO WE BRING ABOUT SUCH POSITIVE LEARNING ENVIRONMENTS IN ALL SCHOOLS, IN ALL CLASSROOMS AND FOR ALL STUDENTS? HERE WE ARE BEGINNING TO LEARN CRITICAL NEW LESSONS ABOUT HOW TO FOSTER THE GRADUAL CULTURAL EVOLUTION WITHIN EACH SCHOOL AND ITS SUPPORT SYSTEMS REQUIRED FOR GREATER ACADEMIC EFFECTIVENESS. ONLY NOW ARE WE LEARNING SPECIFICALLY HOW TO BETTER ORGANIZE, MANAGE AND SUPPORT TEACHERS AND STUDENTS SO THAT WE CAN RELIABLY HELP ALL STUDENTS LEARN.

AS AN ILLUSTRATION OF HOW PRINCIPALS AND TEACHERS CAN TAKE THE RESEARCH ON EFFECTIVE SCHOOLS AND CLASSROOMS SERIOUSLY AND IMPLEMENT IT IN INTEGRATED AND MEANINGFUL WAYS, I WANT TO SHARE WITH YOU A CLASSROOM INSTRUCTIONAL EFFECTIVENESS CHECKLIST (FIGURE 7) DEVELOPED BY A PORTLAND PRINCIPAL WITH AND FOR HER TEACHERS THAT EPITOMIZES THE BEST OF WHAT WE HAVE TO LEARN FROM THE RESEARCH ON EFFECTIVE SCHOOLS.

FIGURE 7

INSTRUCTIONAL EFFECTIVENESS CHECKLIST

1. I HAVE HIGH, BUT PERSONALLY APPROPRIATE STANDARDS OF ACHIEVEMENT AND BEHAVIOR FOR EACH OF MY STUDENTS.

2. I HAVE HIGH STANDARDS OF PERFORMANCE FOR MYSELF AS A TEACHER. I AM NOT SATISFIED UNTIL EACH OF MY STUDENTS MAKES SIGNIFICANT PROGRESS TOWARD ACHIEVEMENT AND BEHAVIOR GOALS.

3. MY STUDENTS RECOGNIZE MY EXPECTATIONS AND SHOW EVIDENCE OF INTERNALIZING THEM. THEY HAVE AN "I CAN LEARN" ATTITUDE AND GENERALLY APPEAR TO FEEL "GOOD" ABOUT THEIR ABILITY TO FUNCTION SUCESSFULLY IN SCHOOL.

4. MY STUDENTS ARE FREQUENTLY APPRIZED OF THEIR PERFORMANCE IN RELATION TO ACADEMIC AND BEHAVIOR GOALS AND ARE RECOGNIZED AND REWARDED FOR GOOD PROGRESS.

5. I HAVE CAREFULLY ASSESSED TEST DATA AND MY OWN OBSERVATIONS, AND HAVE USED THAT INFORMATION AS A GUIDE FOR GOAL SELECTION AND GROUP PLACEMENT IN MY CLASSROOM.

6. I HAVE COMPLETED MY LONG-RANGE INSTRUCTIONAL PLAN. I AM USING THAT PLAN TO TARGET MONTHLY AND WEEKLY GOALS FOR MY STUDENTS. I HAVE DESIGNED OR SELECTED A VARIETY OF EVALUATION PROCEDURES TO CHECK STUDENT PROGRESS ON EACH GOAL SELECTED AND USE THAT INFORMATION TO PLAN APPROPRIATE INSTRUCTION FOR EACH STUDENT.

7. I KEEP ACCURATE RECORDS OF STUDENT PROGRESS. THESE RECORDS ARE USED AS A GUIDE FOR LESSON PLANNING AND THE FORMATION OF SKILL GROUPS.

8. I WRITE WEEKLY LESSON PLANS WHICH INCLUDE: A BALANCED SELECTION OF OBJECTIVES FROM MAJOR GOAL CATEGORIES IN MY LONG-RANGE PLANS, AN EMPHASIS ON DIRECT INSTRUCTION, SEATWORK THAT REINFORCES SKILLS PREVIOUSLY TAUGHT THROUGH DIRECT INSTRUCTION AND THAT CHILDREN CAN PERFORM WITH A HIGH RATE OF SUCCESS, SKILL MAINTENANCE ACTIVITIES, AND EVALUATION PROCEDURES.

9. I HAVE DEVELOPED STRATEGIES TO MEET THE INSTRUCTIONAL NEEDS OF THOSE STUDENTS WHO DO NOT MASTER OBJECTIVES (E.G., FLEXIBLE SKILL GROUPS, INDIVIDUAL TUTORING, SUPPLEMENTARY LEARNING ACTIVITIES, HOMEWORK) WHICH IS EFFICIENT AND EFFECTIVE AND DOES NOT PENALIZE THOSE CHILDREN WHO ARE READY TO PROGRESS TO THE NEXT OBJECTIVE.

10. IF SOME CHILDREN CONTINUE TO HAVE DIFFICULTY AFTER I HAVE TRIED ALTERNATIVE APPROACHES, I SEEK ASSISTANCE FROM OTHER STAFF MEMBERS.

11. I CAREFULLY MONITOR STUDENTS DURING DIRECT INSTRUCTION AND SEATWORK ACTIVITIES TO SEE THAT THEY ARE DEEPLY ENGAGED IN THEIR LEARNING TASKS AND THAT THOSE TASKS ARE OF THE APPROPRIATE DIFFICULTY (TASKS ON WHICH THE STUDENTS CAN HAVE A HIGH RATE OF SUCCESS).

12. I ORGANIZE INSTRUCTIONAL ACTIVITIES, MATERIALS, AND CLASSROOM PROCEDURES SO THAT CHILDREN CAN AND DO MOVE PROMPTLY AND EFFICIENTLY FROM TASK TO TASK.

13. WHEN PLANNING ACTIVITIES IN CONTENT AREAS, I AM CAREFUL TO PROVIDE OPPORTUNITIES FOR THE APPLICATION OF BASIC SKILLS IN LANGUAGE ARTS AND MATHEMATICS.

14. I ASSIGN APPROPRIATE HOMEWORK ASSIGNMENTS TO REINFORCE SKILLS OR CONCEPTS TAUGHT IN THE CLASSROOM. I HAVE A SYSTEM FOR CHECKING THOSE ASSIGNMENTS AND RECOGNIZING STUDENTS WHO COMPLETE THEM.

15. I RECOGNIZE THAT AN EFFECTIVE SCHOOL WHERE EVERY CHILD CAN LEARN REQUIRES THE INDIVIDUAL AND COLLECTIVE BEST EFFORTS OF EVERY MEMBER OF THE STAFF. I HAVE MADE A PERSONAL COMMITMENT TO WORK WITH MY COLLEAGUES AND WITH PARENTS TO INSURE EACH CHILD'S SUCCESS IN HIS OR HER EFFORT TO MEET ACADEMIC AND BEHAVIOR GOALS.

AS LONG AS WE HAVE PRINCIPALS AND TEACHERS LIKE THE ONES WHO DEVELOPED THIS DOCUMENT, I KNOW THAT WE NOT ONLY HAVE MUCH TO LEARN FROM THE RESEARCH ON EFFECTIVE SCHOOLS, BUT MUCH TO GIVE TO IT AS WELL. I LOOK FORWARD TO WORKING WITH MY COLLEAGUES IN AERA TO EXTEND AND IMPLEMENT THIS POWERFUL THRUST TO BETTER SCHOOLING. INDEED, THIS BRIEF STATEMENT WAS UNDERTAKEN AND BEGUN IN THE HOPE THAT IT MIGHT MAKE SOME SMALL CONTRIBUTION TO ENCOURAGING AND FOCUSING THE NEEDED JOINT EFFORTS BY THOSE EXPERT IN CURRICULUM, EVALUATION, INSTRUCTION AND RESEARCH. IF SUCH EFFORTS CAN BE MOUNTED AND SUSTAINED, WE MAY PROGRESS TOGETHER TO THE VERY BOUNDARIES OF THE SCIENCE OF EDUCATION WHICH WE ONLY DIMLY GLIMPSE TODAY.

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4/6/83